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Badari Kakumani

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EXAMINER

NGUYEN, PHILLIP H

ART UNIT

PAPER NUMBER

2193

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/727,099	KAKUMANI ET AL.	
	Examiner	Art Unit	
	Phillip H. Nguyen	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20062704, 20051003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the original filing of December 2, 2003. Claim 1-51 are pending and have been considered below.

Claim Rejections - 35 USC § 101

Claims 23-33 and 49-51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are directed to a computer readable medium which is disclosed as light wave, radio wave, and infrared data communication. The specification provides intrinsic evidence the computer readable medium is intended to cover light wave, radio wave, and infrared data communication (in paragraph 210). Such are currently not believed to enable the computer readable medium to act as a computer component and realize its functionality absent being claimed in combination with the necessary hardware to receive and convert the light wave, radio wave, and infrared data communication to computer usable code.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 does not recite what action is taken if any of the processes have not vetoed the software update. Claim 5 depends on claim 4 and as recited, the scope of claim 5 cannot be determined if none of the processes vetoed the software update. For the examining purposes, the examiner interprets that it just returns the results of the software update if no vetoed is taken.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-10, 12-21, 23-32, 34-41, and 43-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Hellerstein et al (US 7,013,461 B2).

Claim 1: Hellerstain discloses a method of software change modeling for nodes in a distributed network of nodes, the method comprising the computer-implemented steps of:

- a. providing a master node ("service distribution server", in Col 4, line 48);
- b. receiving a software update for a node ("distribution target" in Col 4, line 38) on said master node (Col 4, line 38-40);
- c. wherein the software update contains a software package or a set of software packages (Col 4, line 60);

d. wherein software package contains at least one software module ("collection of software component" in Col 4, line 33) with corresponding software dependency information ("dependencies" in Col 5, line 28-30);

e. wherein said master node notifies ("distributes software package" in Col 5, line 35, and "service distribution server" in Figure 2, the distribution of software package from the service distribution server to the distribution targets inherently including a notification that a software update has been requested since the distribution occurs after the request for software distribution, as depicted in Figure 2.) said node that a software update is being requested; and

f. wherein said master node passes ("distributes", in Col 4, line 51) said node identities ("software package and description", in Col 5, line 26;) of software package(s) to be updated and software dependency information ("dependencies", in Col 5, line 28-30).

Claim 2: Hellerstain discloses the method as in claim 1 above; and further discloses said node determines running processes ("environment of the machine" in Col 8, line 54-58) on said node that will be affected by the software update using the software dependency.

Claim 3: Hellerstain discloses the method as in claim 2 above; and further discloses node notifies processes that have indicated interest ("updatable", in Col 6, line 61-63) in software updates that the software update is being requested ("software

package will only be installed on a specific target if service is either flagged as updatable", in Col 6, line 61-63); wherein each notified process evaluates the effect that the software update will have on its operation ("software updates should only occur between 11 PM and 6 AM" in Col 6, line 64, if software update occurs at different time, it may effect the running process on the system); wherein if any of the processes determine that the software update will degrade or have a negative impact ("conflict") on said node's normal operation, the process returns a veto ("block" in Col 10, line 11-12) to said node along with reason why ("if obtaining a new policy definition, a conflict is detected with existing policies, the new policy is rejected" in Col 9, line 50-55; "user may not want to such update for various reasons" Col 11, line 31-32); wherein if a process finds that the software update will have no negative effects, the process returns an acceptance ("new policy is entered into the policy repository", in Col 9, line 56-57) of the software update to said node.

Claim 4: Hellerstain discloses the method as in claim 3 above; and further discloses node waits for all of the notified processes to return the results of their evaluations ("Installation results are gathered at region server" in Col 8, line 67) and once all of the processes have reported to said node, said node notifies ("the region server sends status of the distribution step to the service distribution server" in Col 9, line 2-3) said master node if any of the processes have vetoed ("block" in Col 10, line 11-12) the software update along with their reasons ("user may not want such an update for various reasons" in Col 11, line 31).

Claim 5: Hellerstain discloses the method as in claim 4 above; and further discloses master node ("service distribution server" in Col 4, line 48) displays ("CRT display, printer, etc., for presenting results associated with the processing unit" in Col 12, line 8-9) node identifiers and the processes that have vetoed ("block" in Col 10, line 11-12) the software update along with their reasons to a user ("user may not want such update for various reasons" in Col 11, line 31-32).

Claim 6: Hellerstain discloses the method as in claim 1 above; and further discloses a user ("administer" in Figure 2) initiates a software update by installing an image containing the software update onto said master node (Col 4, line 52).

Claim 7: Hellerstain discloses the method as in claim 6 above; and further discloses the user indicates what nodes and which software package(s) are to be updated (administer prepares a new software item to be distributed to a set of desktops machines, Col 5, line 10-12).

Claim 8: Hellerstain discloses the method as in claim 1 above; and further discloses a software package indicates the type of node to which it applies (Col 7, line 50-52).

Claim 9: Hellerstain discloses the method as in claim 1 above; and further discloses the software update contains a list of software package destined for each node (Col 2, line 31-33).

Claim 10: Hellerstain discloses the method as in claim 1 above; and further discloses a software package contains version information (Col 7, line 60-61), dependency information (Col 6, line 4-5), and other metadata information ("description of the software package" in Col 6, line 7-9) pertaining to software in the package.

Claim 12: Hellerstain discloses a apparatus of software change modeling for nodes in a distributed network of nodes, comprising:

- a. a master node ("service distribution server", in Col 4, line 48);
- b. means for receiving a software update for a node ("distribution target", in Col 4, line 38) on said master node (Col 4, line 38-40);
- c. wherein the software update contains a software package or a set of software packages (Col 4, line 60);
- d. wherein software package contains at least one software module ("collection of software component", in Col 4, line 33) with corresponding software dependency information ("dependency" in Col 5, line 28-30);
- e. wherein said master node notifies ("distributes software package" in Col 5, line 35, and "service distribution server" Figure 2, the distribution of software package from the service distribution server to the distribution targets inherently including a

notification that a software update has been requested since the distribution occurs after the request for software distribution, as depicted in Figure 2.) said node that a software update is being requested; and

f. wherein said master node passes ("distributes" in Col 4, line 51) said node identities ("software package and description" in Col 5, line 28-30) of software package(s) to be updated and software dependency information ("dependency" in Col 5, line 28-30).

Claim 13: Hellerstain discloses the apparatus as in claim 12 above; and further discloses said node determines running processes ("environment of the machine" in Cl 8, line 54-58) on said node that will be affected by the software update using the software dependency.

Claim 14: Hellerstain discloses the apparatus as in claim 13 above; and further discloses node notifies processes that have indicated interest ("updatable" in Col 6, line 61-63) in software updates that the software update is being requested ("software package will only be installed on a specific target if service is either flagged as updatable" in Col 6, line 61-63); wherein each notified process evaluates the effect that the software update will have on its operation ("software updates should only occur between 11 PM and 6 AM" in Col 6, line 64, if software update occurs at different time, it may effect the running process on the system); wherein if any of the processes determine that the software update will degrade or have a negative impact ("conflict") on

said node's normal operation, the process returns a veto to said node along with reason why ("if obtaining a new policy definition, a conflict is detected with existing policies, the new policy is rejected" in Col 9, line 50-55; "user may not want to such update for various reasons" Col 11, line 31-32); wherein if a process finds that the software update will have no negative effects, the process returns an acceptance ("new policy is entered into the policy repository" in Col 9, line 56-57) of the software update to said node.

Claim 15: Hellerstain discloses the apparatus as in claim 14 above; and further discloses node waits for all of the notified processes to return the results of their evaluations ("Installation results are gathered at region server" in Col 8, line 67) and once all of the processes have reported to said node, said node notifies ("the region server sends status of the distribution step to the service distribution server" in Col 9, line 2-3) said master node if any of the processes have vetoed ("block" in Col 10, line 11-12) the software update along with their reasons ("user may not want such an update for various reasons" in Col 11, line 31).

Claim 16: Hellerstain discloses the apparatus as in claim 15 above; and further discloses master node ("service distribution server" in Col 4, line 48) displays ("CRT display, printer, etc., for presenting results associated with the processing unit" in Col 12, line 8-9) node identifiers and the processes that have vetoed ("block" in Col 10, line 11-12) the software update along with their reasons to a user ("user may not want such update for various reasons" in Col 11, line 31-32).

Claim 17: Hellerstain discloses the apparatus as in claim 12 above; and further discloses a user ("administer" in Figure 2) initiates a software update by installing an image containing the software update onto said master node (Col 4, line 52).

Claim 18: Hellerstain discloses the apparatus as in claim 17 above; and further discloses the user indicates what nodes and which software package(s) are to be updated (administer prepares a new software item to be distributed to a set of desktops machines, Col 5, line 10-12).

Claim 19: Hellerstain discloses the apparatus as in claim 12 above; and further discloses a software package indicates the type of node to which it applies (Col 7, line 50-52).

Claim 20: Hellerstain discloses the apparatus as in claim 12 above; and further discloses the software update contains a list of software package destined for each node (Col 2, line 31-33).

Claim 21: Hellerstain discloses the apparatus as in claim 12 above; and further discloses a software package contains version information (Col 7, line 60-61), dependency information (Col 6, line 4-5), and other metadata information ("description of the software package" in Col 6, line 7-9) pertaining to software in the package.

Claim 23: Hellerstain discloses a computer readable medium carrying one or more sequence of instructions for software change modeling for nodes in a distributed network of nodes, which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of:

- a. providing a master node ("service distribution server", in Col 4, line 48);
- b. receiving a software update for a node ("distribution target", in Col 4, line 38) on said master node (Col 4, line 38-40);
- c. wherein the software update contains a software package or a set of software packages (Col 4, line 60);
- d. wherein software package contains at least one software module ("collection of software component", in Col 4, line 33) with corresponding software dependency ("dependency", in Col 5, line 28-30);
- e. wherein said master node notifies ("distributes software package" in Col 5, line 35, and "service distribution server" in Figure 2, the distribution of software package from the service distribution server to the distribution targets inherently including a notification that a software update has been requested since the distribution occurs after the request for software distribution, as depicted in Figure 2.) said node that a software update is being requested; and
- f. wherein said master node passes ("distributes", Col 4, line 51) said node identities ("software package and description", Col 5, line 26) of software package(s) to be updated and software dependency information ("dependency" Col 5, line 28-30).

Claim 24: Hellerstain discloses the computer-readable medium as in claim 23 above; and further discloses said node determines running processes ("environment of the machine" in Col 8, line 54-58) on said node that will be affected by the software update using the software dependency.

Claim 25: Hellerstain discloses the computer readable medium as in claim 24 above; and further discloses node notifies processes that have indicated interest ("updatable" in Col 6, line 61-63) in software updates that the software update is being requested ("software package will only be installed on a specific target if service is either flagged as updatable", Col 6, line 61-63); wherein each notified process evaluates the effect that the software update will have on its operation ("software updates should only occur between 11 PM and 6 AM" in Col 6, line 64, if software update occurs at different time, it may effect the running process on the system); wherein if any of the processes determine that the software update will degrade or have a negative impact ("conflict") on said node's normal operation, the process returns a veto (rejection) to said node along with reason why ("if obtaining a new policy definition, a conflict is detected with existing policies, the new policy is rejected" in Col 9, line 50-55; "user may not want to such update for various reasons" Col 11, line 31-32); wherein if a process finds that the software update will have no negative effects, the process returns an acceptance("new policy is entered into the policy repository" in Col 9, line 56-57) of the software update to said node.

Claim 26: Hellerstain discloses the computer readable medium as in claim 25 above; and further discloses node waits for all of the notified processes to return the results of their evaluations ("Installation results are gathered at region server" in Col 8, line 67) and once all of the processes have reported to said node, said node notifies ("the region server sends status of the distribution step to the service distribution server" in Col 9, line 2-3) said master node if any of the processes have vetoed ("block" in Col 10, line 11-12) the software update along with their reasons ("user may not want such an update for various reasons" in Col 11, line 31).

Claim 27: Hellerstain discloses the computer readable medium as in claim 26 above; and further discloses master node ("service distribution server" in Col 4, line 48) displays ("CRT display, printer, etc., for presenting results associated with the processing unit" in Col 12, line 8-9) node identifiers and the processes that have vetoed ("block" in Col 10, line 11-12) the software update along with their reasons to a user ("user may not want such update for various reasons" in Col 11, line 31-32).

Claim 28: Hellerstain discloses the computer readable medium as in claim 23 above; and further discloses a user ("administer" in Figure 2) initiates a software update by installing an image containing the software update onto said master node (Col 4, line 52).

Claim 29: Hellerstain discloses the computer readable medium as in claim 28 above; and further discloses the user indicates what nodes and which software package(s) are to be updated (administer prepares a new software item to be distributed to a set of desktops machines, Col 5, line 10-12).

Claim 30: Hellerstain discloses the computer readable medium as in claim 23 above; and further discloses a software package indicates the type of node to which it applies (Col 7, line 50-52).

Claim 31: Hellerstain discloses the computer readable medium as in claim 23 above; and further discloses the software update contains a list of software package destined for each node (Col 2, line 31-33).

Claim 32: Hellerstain discloses the computer readable medium as in claim 23 above; and further discloses a software package contains version information (Col 7, line 60-61), dependency information (Col 6, line 4-5), and other metadata information ("description of the software package" in Col 6, line 7-9) pertaining to software in the package.

Claim 34: Hellerstain discloses a method of software change modeling of networked nodes on a computer system, the method comprising the computer implemented steps of:

- a. providing a software update simulator ("region server" in Col 4, line 46, the region server simulates the functions of the targets 202 when viewed from the service distribution server) on said computer system;
- b. simulating processes from at least one node ("target 202" in Figure 2) on said computer system (Col 4, line 40-41);
- c. wherein each functional process from said node is a minimal version of a functional process that runs on said node (a legacy version in Col 5, line 12) and receiving a software update for a node by said software update simulator ("distributes software to targets" in Col 4, line 51);
- d. wherein the software update contains a software package or a set of software package (Col 4, line 60);
- e. wherein a software package contains at least one software module ("collection of software components" in Col 4, line 33) with corresponding software dependency information ("dependency" in Col 5, line 28-30);
- f. wherein said software update simulator notifies ("distributes software package" in Col 5, line 35, and "service distribution server" in Figure 2, the distribution of software package from the service distribution server to the distribution targets inherently including a notification that a software update has been requested since the distribution occurs after the request for software distribution, as depicted in Figure 2) a control process for said node that a software update is being requested; and

g. wherein said software update simulator passes ("distributes" in Col 4, line 51) said control process identities ("software package and description" in Col 5, line 25-26) of software package(s) to be updated and software dependency information.

Claim 35: Hellerstain discloses the method as in claim 34 above; and further discloses said control process determines running functional node processes ("environment of the machine" in Col 8, line 54-58) that will be affected by the software update using the software dependency.

Claim 36: Hellerstain discloses the method as in claim 35 above; and further discloses control process notifies processes that have indicated interest ("updatable" in Col 6, line 61-63) in software updates that the software update is being requested ("software package will only be installed on a specific target if service is either flagged as updatable", Col 6, line 61-63); wherein each notified process evaluates the effect that the software update will have on its operation ("software updates should only occur between 11 PM and 6 AM" in Col 6, line 64, if software update occurs at different time, it may effect the running process on the system.); wherein if any of the processes determine that the software update will degrade or have a negative impact ("conflict") on said node's normal operation, the process returns a veto to said node along with reason why ("if obtaining a new policy definition, a conflict is detected with existing policies, the new policy is rejected", in Col 9, line 50-55; "user may not want to such update for various reasons" Col 11, line 31-32); wherein if a process finds that the software update

Art Unit: 2193

will have no negative effects, the process returns an acceptance("new policy is entered into the policy repository" in Col 9, line 56-57) of the software update to said node.

Claim 37: Hellerstain discloses the method as in claim 36 above; and further discloses said control process waits for all of the notified processes to return the results of their evaluations ("Installation results are gathered at region server" in Col 8, line 67) and once all of the processes have reported to said node, said node notifies ("the region server sends status of the distribution step to the service distribution server" in Col 9, line 2-3) said master node if any of the processes have vetoed ("block" in Col 10, line 11-12) the software update along with their reasons ("user may not want such an update for various reasons" in Col 11, line 31).

Claim 38: Hellerstain discloses the method as in claim 37 above; and further discloses said software update simulator("region server" in Col 4, line 46) displays ("CRT display, printer, etc., for presenting results associated with the processing unit" in Col 12, line 8-9) node identifiers and the processes that have vetoed ("block" in Col 10, line 11-12) the software update along with their reasons to a user ("user may not want such update for various reasons" in Col 11, line 31-32).

Claim 39: Hellerstain discloses the method as in claim 34 above; and further discloses a user ("administer" in Figure 2) initiates a software update by loading an image containing the software update into said software update simulator (Col 4, line 52).

Claim 40: Hellerstain discloses the method as in claim 39 above; and further discloses the user indicates what nodes and which software package(s) are to be updated (administer prepares a new software item to be distributed to a set of desktops machines, Col 5, line 10-12).

Claim 41: Hellerstain discloses the method as in claim 34 above; and further discloses a software package contains version information (Col 7, line 60-61), dependency information (Col 6, line 4-5), and other metadata information ("description of the software package" in Col 6, line 7-9) pertaining to software in the package.

Claim 43: Hellerstain discloses a method of software change modeling of node in a networked nodes on a computer system, the method comprising the computer implemented steps of:

- a. providing a software update simulator ("region server" in Col 4, line 46, the region server simulates the functions of the targets 202 when viewed from the service distribution server) on said computer system;

- b. wherein said software simulator("region server") runs software components normally run on a master node in the network of nodes (Col 4, line 46-54);
- c. wherein a user loads a node's current software configuration into said software simulator by loading current software modules installed on a node (Col 2, line 64-66);
- d. wherein the user requests a simulation of a software update by loading an updated software image into said simulator (Col 1, line 57);
- e. wherein the software image contains a software package or a set of software package (Col 1, line 57);
- f. wherein a software package contains at least one software module ("a collection of software components", in Col 4, line 33) with corresponding software dependency information (Col 5, line 28-30);
- g. wherein said software simulator calculates ("detects" in Col 9, line 55) the software update's impact on said node using the current software configuration of said node ("If after obtaining a new policy definition, a conflict is detected....", in Col 9, line 54-55); and
- h. displaying ("CRT display, printer, for presenting results associated with the processing unit" in Col 12, line 8-10) the calculation's results ("the results of the distribution step are gathered" in Col 8, line 64-65) to the user (Col 9, line 1-3).

Claim 44: Hellerstain discloses the method as in claim 43 above; and further discloses the user also indicates to said software simulator the type of node being analyzed (Col 7, line 50-52).

Claim 45: Hellerstain discloses the method as in claim 43 above; and further discloses the software update is a software downgrade ("upgrade" in Col 7, line 33, the process of updating software involves with removing the old modules or modules that do not perform correctly and replacing them with a newer modules) where modules are being removed.

Claim 46: Hellerstain discloses an apparatus of software change modeling in a networked of nodes on a computer system, comprising:

- a. a software update simulator ("region server" in Col 4, line 46, the region server simulates the functions of the targets 202 when viewed from the service distribution server) on said computer system (Col 4, line 46);
- b. wherein said software simulator runs software components normally run on a master node in the network of nodes (Col 4, line 46-54);
- c. wherein a user ("administrator") loads ("requests for distribution of software package" in Figure 2) a node's current software configuration into said software simulator by loading current software modules installed on a node ("package is distributed region server" in Col 5, line 22);

d. wherein the user ("administrator" in Figure 2) requests a simulation of a software update by loading an updated software image into said simulator ("distributes package to region server" in Col 5, line 22);

e. wherein the software image contains a software package or a set of software package (Col 1, line 57);

f. wherein a software package contains at least one software module ("collection of software components" in Col 4, line 33) with corresponding software dependency information ("dependency" in Col 5, line 28-30);

g. wherein said software simulator calculates ("detects" in Col 9, line 55) the software update's impact ("if after obtaining a new policy definition, a conflict is detected...", in Col 9, line 54-55) on said node using the current software configuration of said node; and

h. means for displaying ("CRT display, printer, etc, for presenting results associated with the processing unit" in Col 12, line 8-10) the calculation's results ("the results of the distribution step are gathered" in Col 8, line 64-65) to the user.

Claim 47: Hellerstain discloses the apparatus as in claim 46 above; and further discloses the user also indicates to said software simulator the type of node being analyzed (Col 7, line 50-52).

Claim 48: Hellerstain discloses the method as in claim 46 above; and further discloses the software update is a software downgrade ("upgrade" in Col 7, line 33, the

process of updating software involves with removing the old modules or modules that do not perform correctly and replacing them with a newer modules) where modules are being removed.

Claim 49: Hellerstain discloses a computer readable medium carrying one or more sequences of instructions for software change modeling of node in a networked of nodes on a computer system, which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of:

- a. providing a software update simulator ("region server" in Col 4, line 46, the region server simulates the functions of the target 202 when viewed from the service distribution server) on said computer system (Col 4, line 46);
- b. wherein said software simulator runs software components normally run on a master node in the network of nodes (Col 4, line 46-54);
- c. wherein a user ("administrator") loads ("requests for distribution of software package" in Figure 2) a node's current software configuration into said software simulator by loading current software modules installed on a node ("package is distributed to region server" in Col 5, line 22);
- d. wherein the user ("administrator" in Figure 2) requests a simulation of a software update by loading an updated software image into said simulator (Col 5, line 22);
- e. wherein the software image contains a software package or a set of software package (Col 1, line 57);

f. wherein a software package contains at least one software module ("collection of software components" in Col 4, line 33) with corresponding software dependency information (Col 5, line 28-30);

g. wherein said software simulator calculates ("detects" in Col 9, line 55) the software update's impact ("if after obtaining a new policy definition, a conflict is detected...", in Col 9, line 54-55) on said node using the current software configuration of said node (Col 8, line 63-67); and

h. displaying ("CRT display, printer; etc, for presenting the results associated with the processing unit" in Col 12, line 8-10) the calculation's results ("the results of the distribution step are gathered" in Col 8, line 64-65) to the user (Col 9, line 1-3).

Claim 50: Hellerstain discloses the computer readable medium as in claim 49 above; and further discloses the user also indicates to said software simulator the type of node being analyzed (Col 7, line 50-52).

Claim 51: Hellerstain discloses the method as in claim 49 above; and further discloses the software update is a software downgrade ("upgrade" in Col 7, line 33, the process of updating software involves with removing the old modules or modules that do not perform correctly and replacing them with a newer modules) where modules are being removed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11, 22, 33, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hellerstein et al. (US 7,013,461 B3).

Claim 11: Hellerstain discloses the method as in claim 10 above, but does not explicitly disclose wherein the metadata includes a list of application program interface (API) providers and consumers. However, it would be obvious to one having an ordinary skill in the art at the time the invention was made to recognize that any combination of software programs, they are either API providers or API consumers in order to communicate with the operating systems and they make it easier for the users to learn new software program. Therefore, one would have been motivated to include both API providers and consumers in the description of software package of Hellerstain's approach to allow the software program communicating with the operating system and it easier for the users to learn new software program.

Claim 22: Hellerstain discloses the apparatus as in claim 12 above, but does not explicitly disclose wherein the metadata includes a list of application program interface (API) providers and consumers. However, it would be obvious to one having an

Art Unit: 2193

ordinary skill in the art at the time the invention was made to recognize that any combination of software programs, they are either API providers or API consumers in order to communicate with the operating systems and they make it easier for the users to learn new software program. Therefore, one would have been motivated to include both API providers and consumers in the description of software package of Hellerstain's approach to allow the software program communicating with the operating system and it easier for the users to learn new software program.

Claim 33: Hellerstain discloses the computer readable medium as in claim 23 above, but does not explicitly disclose wherein the metadata includes a list of application program interface (API) providers and consumers. However, it would be obvious to one having an ordinary skill in the art at the time the invention was made to recognize that any combination of software programs, they are either API providers or API consumers in order to communicate with the operating systems and they make it easier for the users to learn new software program. Therefore, one would have been motivated to include both API providers and consumers in the description of software package of Hellerstain's approach to allow the software program communicating with the operating system and it easier for the users to learn new software program.

Claim 42: Hellerstain discloses the method as in claim 34 above, but does not explicitly disclose wherein the metadata includes a list of application program interface (API) providers and consumers. However, it would be obvious to one having an

Art Unit: 2193

ordinary skill in the art at the time the invention was made to recognize that any combination of software programs, they are either API providers or API consumers in order to communicate with the operating systems and they make it easier for the users to learn new software program. Therefore, one would have been motivated to include both API providers and consumers in the description of software package of Hellerstain's approach to allow the software program communicating with the operating system and it easier for the users to learn new software program.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Aija et al. (US 6,928,579 B2) discloses crash recovery system
- b. Mittal (US 2005/0022182) discloses system and associated method for downloading an application.
- c. Fink et al. (5,953,533) discloses computer software distribution, installation and maintenance method and apparatus.
- d. Kelley et al. (US 2002/0174422 A1) discloses software distribution system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571)

Art Unit: 2193

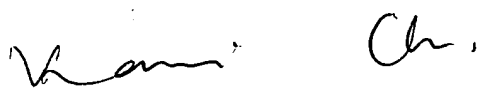
270-1070. The examiner can normally be reached on Monday - Friday 10:00 AM - 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N.
9/29/06

Kakali Chaki
Supervisory Patent Examiner


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